

Name _____



Date _____

Logarithms

(Answer ID # 0333656)

Solve for the unknown.

$$1. \quad \log_{(1/4)} \left[\frac{1}{256} \right] + \log_{(1/2)} \left[\frac{1}{4} \right] = 6$$

$$2. \quad \log_9 3 - \log_{81} 9 = v$$

$$3. \quad \log_4 1024 + \log_4 16 - \log_4 4096 = j$$

$$4. \quad \log_4 \left[\frac{1}{64} \right] - \log_9 (x + 63) = -5$$

$$5. \quad \log_6 36 + \log_9 729 = 5$$

$$6. \quad \log_{(1/3)} 81 + \log_{(1/3)} 81 - \log_9 27 = s$$

$$7. \quad \log_4 b + \log_{27} 9 - \log_{(1/3)} \left[\frac{1}{27} \right] = \frac{-11}{6}$$

$$8. \quad \log_{(1/2)} 8 + \log_9 27 - \log_5 (x + 565) = \frac{-11}{2}$$

9. $\log_{(1/2)} \left[\frac{1}{4} \right] - \log_9 27 + \log_{16} 4 + \log_{(1/4)} 64 = -2$

10. $\log_t 4 - \log_9 \left[\frac{1}{81} \right] - \log_6 \left[\frac{1}{216} \right] - \log_7 343 = \frac{5}{2}$

11. $\log_{27} 3 + \log_8 (42 + x) + \log_8 4 + \log_4 2 = \frac{7}{2}$

12. $\log_{(1/3)} \left[\frac{1}{9} \right] - \log_{(1/4)} \left[\frac{1}{16} \right] - \log_6 1296 + \log_3 f = -10$

13. $\log_{27} 3 + \log_{(1/2)} 8 - \log_{(1/2)} 16 + \log_7 2401 = \frac{16}{3}$

Name _____



Date _____

Logarithms

(Answer ID # 0187435)

Solve for the unknown.

$$1. \quad \log_{(1/4)} \left[\frac{1}{256} \right] + \log_{(1/2)} \left[\frac{1}{4} \right] = 6$$

2

$$2. \quad \log_9 3 - \log_{81} 9 = v$$

0

$$3. \quad \log_4 1024 + \log_4 16 - \log_4 4096 = j$$

1

$$4. \quad \log_4 \left[\frac{1}{64} \right] - \log_9 (x + 63) = -5$$

18

$$5. \quad \log_6 36 + \log_9 729 = 5$$

3

$$6. \quad \log_{(1/3)} 81 + \log_{(1/3)} 81 - \log_9 27 = s$$

$\frac{-19}{2}$

$$7. \quad \log_4 b + \log_{27} 9 - \log_{(1/3)} \left[\frac{1}{27} \right] = \frac{-11}{6}$$

2

8. $\log_{(1/2)} 8 + \log_9 27 - \log_5 (x + 565) = \frac{-11}{2}$

60

9. $\log_{(1/2)} \left[\frac{1}{4} \right] - \log_9 27 + \log_{16} 4 + \log_{(1/4)} 64 = -2$

10. $\log_t 4 - \log_9 \left[\frac{1}{81} \right] - \log_6 \left[\frac{1}{216} \right] - \log_7 343 = \frac{5}{2}$

16

11. $\log_{27} 3 + \log_8 (42 + x) + \log_8 4 + \log_4 2 = \frac{7}{2}$

22

12. $\log_{(1/3)} \left[\frac{1}{9} \right] - \log_{(1/4)} \left[\frac{1}{16} \right] - \log_6 1296 + \log_3 f = -10$

$\frac{1}{729}$

13. $\log_{27} 3 + \log_{(1/2)} 8 - \log_{(1/2)} 16 + \log_7 2401 = \frac{16}{3}$

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